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Before the Committee on Energy and Commerce

September 7, 2005

Summary

Hurricane Katrina is among the worst natural disasters in American history. While Katrina produced a horrendous catastrophe along the Gulf Coast its impact has also rippled across the country. For many Americans this is most evident in the price of gasoline. Both immediate and long-term responses are needed that address the fundamental vulnerability that hurricane Katrina revealed. We should, however, avoid inappropriate and ineffective responses to Katrina.

EPA's prompt action to temporarily waive certain clean fuels requirements has ensured that these standards are playing no role in the gasoline price increases that consumers have seen during the last week. EPA's action also demonstrates that current law already provides the necessary authority to respond to short-term supply disruptions. No permanent changes to clean air laws can be justified based on the aftermath of Katrina, and responsible policy and the law require that clean air wavers should be extended no longer than necessary to respond to the actual supply disruption.

Similarly, while it may be desirable to increase refinery capacity, there is no justification for relaxing environmental requirements in order to site new refineries. There is simply no evidence that environmental requirements have played a significant role in the economic decisions refiners have made to consolidate and reduce spare capacity.

Renewed calls to open the Arctic National Wildlife Refuge to oil exploration and production are also impossible to justify based on the short-term supply disruption caused by Katrina. Even with EIA's optimistic estimate of potential annual production from the Arctic Refuge, drilling would affect gasoline prices by less than 1.5 cents per gallon in 2025.

The fundamental vulnerability revealed by Katrina is rooted in America's dangerous dependence on petroleum. Oil markets were already tight before Katrina struck due to rising demand and political instability in the Middle East. Refinery acquisition costs for crude oil had more than doubled from $24 per barrel in 2002 to almost $53 per barrel in July 2005.

With only 3 percent of the world's oil reserves and 25 percent of the world's oil demand, there is no way for the United States to drill its way to energy security. The only effective way to reduce our vulnerability to oil price shocks is to significantly reduce our dependence on oil. For example, for an average family driving 2500 miles in a month, a $1/gallon run up in gasoline prices takes $120 out of their monthly budget at 21 miles per gallon, but only $60 at 42 miles per gallon.

To respond to the short-term disruption the president should call on the nation to adopt five immediate conservation measures: 1) check tire pressure; 2) obey the speed limit; 3) turn off the car engine while waiting in line; 4) use car pools and public transit and telecommute; 5) keep cars tuned and use fuel efficient engine oils.

To reduce our vulnerability and increase our security in the future the Set America Free coalition of national security organizations, religious leaders and energy experts calls on Congress to establish a minimum national commitment to save 2.5 million barrels per day by 2015 and 10 million barrels per day by 2025. A national commitment to oil savings could yield more than 15 times as much as production from the Arctic Refuge cumulatively over the next 20 years (see exhibit). Equally important, in contrast to oil savings, Arctic Refuge drilling would do nothing to insulate our economy from the effects of future oil supply disruptions, which would ripple through the oil market and affect the price of domestic and imported crude equally.

Introduction

Thank you Mr. Chairman. My name is Daniel Lashof and I am a senior scientist at the Natural Resources Defense Council. I appreciate the invitation to participate in today's hearing.

Mr. Chairman, it is now clear that hurricane Katrina is among the worst natural disasters in American history. My deepest sympathy goes to the victims and their families and my deepest respect goes to the emergency workers who are struggling to provide relief in almost unimaginable conditions.

While Katrina produced a horrendous catastrophe along the Gulf Coast its impact has also rippled across the country. For many Americans this is most evident in the price of gasoline. For some of us this is an annoyance that means that our Labor Day trip to the beach was a little more expensive than we had anticipated. But for millions of low-income Americans higher energy costs have thrown carefully balanced family budgets out of whack, creating real hardship.

With tempers running short as some motorists have watched the price of gasoline increase as they were waiting in line to fill up, it is natural to look for someone to blame. I urge that we resist the temptation to offer simplistic explanations or simplistic solutions. Where there is evidence of price gouging it should be investigated and prosecuted to the full extent of the law. But we also need both immediate and long-term responses that address the fundamental vulnerability that hurricane Katrina revealed.

First, Do No Harm

Some argue that America should open its wild lands for oil exploration and drilling or relax environmental safeguards to reduce gasoline prices and U.S. dependence on imported oil. But these are inappropriate, wasteful, and ineffective responses to the aftermath of Katrina.

EPA's prompt action to temporarily waive certain clean fuels requirements has ensured that these standards are playing no role in the gasoline price increases that consumers have seen during the last week. EPA's action also demonstrates that current law already provides the necessary authority to respond to short-term supply disruptions. No permanent changes to clean air laws can be justified based on the aftermath of Katrina, and responsible policy and the law require that clean air wavers should be extended no longer than necessary to respond to the actual supply disruption. If Congress wants to reduce the number of different fuel specifications it should make it easier for states and regions to adopt the federal reformulated gasoline program, and not lock in the use of dirtier conventional fuels.

Some have cited a decline in the number of refineries operating in the United States as evidence that environmental regulations have discouraged investment in new capacity, driving up gasoline prices. The facts do not support this claim, however. While the total number of refineries has declined, total capacity has increased as refiners have found it to be more cost effective to expand capacity at existing facilities than to operate small refineries or build new green field plants. Refiners have also consciously sought to reduce excess capacity to improve refinery margins. Environmental permitting has not played a significant role in these decisions. In response to an inquiry from the Ranking Member of the Committee, EPA has said that there are no pending environmental permit applications from any of the U.S. refineries that closed since 1980.[1] With regard to new refiners, the record shows that in the case of the proposed facility in Yuma, Arizona, an air quality installation and operating permit was granted by the Arizona Department of Environmental Quality less than a year after a complete application was received.2

[1] Letter from Charles Ingebretson, EPA Associate Administrator, to Congressman Dingell, dated September 29, 2004.

[2] The permit was granted on April 14, 2005. Letter from Nancy Wrona, Director Air Quality Devision, Arizona Department of Environmental Quality, to Jeff Donofrio, Committee on Energy and Commerce Democratic Staff, dated July 29, 2004 shows that the complete application was received on July 14, 2004.

Similarly, renewed calls to open the Arctic National Wildlife Refuge to oil exploration and production are also impossible to justify based on the short-term supply disruption caused by Katrina. Although drilling advocates claim there is potentially 16 billion barrels of oil in the Arctic National Wildlife Refuge, this figure is an upper bound estimate (one-in-twenty chance) for the amount of oil that is potentially recoverable, regardless of extraction costs. Using a price-adjusted mean estimate (which better represents the basis for production decisions regarding potential future discoveries), the actual amount of oil that is economically extractable would be far less. Investment decisions would be made based on expectations of long-term average prices, which are far lower than current peaks. For example, at $40 per barrel the economically recoverable total would be about 6.7 billion barrels. Moreover, it would take 10 years for any oil from the Arctic Refuge to reach the market. Even during the predicted production peak in 2027, the coastal plain would produce about 3 percent of America's daily oil demand.[3] Even with EIA's optimistic estimate of potential annual production from the Arctic Refuge, which is much higher than can be justified by actual experience with North Slope fields, drilling would affect gasoline prices by less than 1.5 cents per gallon in 2025.[4]

A national commitment to oil savings could yield more than 15 times as much as production from the Arctic Refuge cumulatively over the next 20 years (see exhibit). Equally important, in contrast to oil savings, Arctic Refuge drilling would do nothing to insulate our economy from the effects of future oil supply disruptions, which would ripple through the oil market and affect the price of domestic and imported crude equally.

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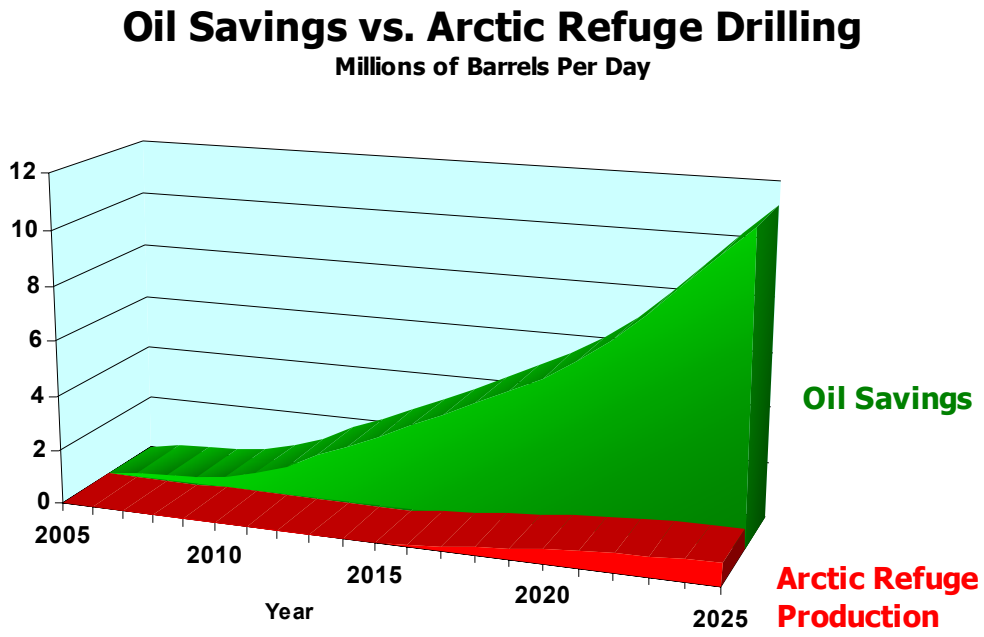
[3] Arctic National Wildlife Refuge production analysis conducted by Richard A. Fineberg (Principal Investigator, Research Associates), January 2005.

[4] U.S.DOE/EIA. Impacts of Modeled Provisions of H.R.6 EH. http://www.eia.doe.gov/oiaf/servicerpt/hr/pdf/sroiaf(2005)04.pdf. EIA estimates that allowing drilling in the Arctic Refuge will reduce world oil prices by $0.57 per barrel in 2025. Assuming a one-to-one impact on gasoline prices, this translates into $0.57/42 = $0.014 per gallon.



Dangerous Dependence

Our fundamental vulnerability is rooted in America's dangerous dependence on oil. Thirty years after the first Arab Oil Embargo our transportation sector remains 97 percent dependent on oil; imports account for over half of our supply; and our vehicle fleet remains woefully inefficient. In fact, after increasing from 13.1 to 22.1 miles per gallon between 1975 and 1987 the average fuel efficiency of new personal vehicles has actually declined to 21 miles per gallon in 2005, according to the latest government report.[5]

As a result of rising global demand, particularly in the United States and China, and unrest in the Middle East and other major oil producing areas, oil markets were already tight before Katrina struck. Refinery acquisition costs for crude oil had more than doubled from $24 per barrel

[5] Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2005. EPA420-R-05-001. July 2005.

in 2002 to almost $53 per barrel in July 2005.[6] China's 32 percent, or 1.6 million barrel per day, increase in oil consumption between 2001 and 2004 was the largest single factor increasing global demand, but the United States was not far behind. Although U.S. consumption grew by only 5.5 percent over this period, that represented more than a 1 million barrel per day increase due to our much larger consumption base.[7]

With only 3 percent of the world's oil reserves and 25 percent of the world's oil demand, there is no way for the United States to drill its way to energy security. The only effective way to reduce our vulnerability to oil price shocks is to significantly reduce our dependence on oil. For example, if the fuel efficiency of our personal vehicle fleet was 42 miles per gallon today, rather than 21 miles per gallon, U.S. oil demand would be lower by 4 million barrels per day, oil markets would have spare capacity, and the impact of any gasoline price spike would be far smaller. For an average family driving 2500 miles in a month, a $1/gallon run up in gasoline prices takes $120 out of their monthly budget at 21 miles per gallon, but only $60 at 42 miles per gallon.

Unfortunately, neither the energy bill enacted last month nor the fuel economy standards proposed on August 23rd will achieve substantial oil savings.

The United States needs to make a national commitment to reduce our oil dependence, through both immediate conservation measures and through investments that increase our efficiency and diversify our sources of fuel.

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[6] U.S. Department of Energy, Energy Information Administration. http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_marketing_monthly/current/txt/tables01.txt Accessed September 2, 2005.

[7] U.S. Department of Energy, Energy Information Administration. http://www.eia.doe.gov/emeu/ipsr/t24.xls Accessed September 2, 2005.

Immediate Conservation Measures

During the Second World War, Americans met our nation's energy challenges with an unprecedented spirit of conservation, using every gallon of gasoline wisely. Californians showed again during the electricity crisis in 2001 that the conservation spirit is alive and well today, responding by cutting their power demand by 10 percent without any draconian measures.

The President should announce a "National Emergency Gasoline Conservation Program" to respond to the short-term supply disruption caused by Katrina. There are five simple steps American consumers and businesses could begin taking immediately to reduce gasoline consumption. These steps could cut gasoline consumption by several percent, helping to relieve gasoline shortages, save money, and cut pollution at the same time.

In contrast to drilling in the Arctic National Wildlife Refuge, which would not begin to produce oil for many years, these measures would yield immediate benefits.

1. **Check tire pressure.**
    - More than a quarter of all cars and nearly one-third of all SUVs, vans, and pickups are driven with tires at least 8 pounds below their proper levels, according to a new survey by the Department of Transportation.
    - If all Americans kept their tires properly inflated, our nation would cut its gasoline use by 2 percent.
    - Maintaining the correct tire pressure also would save lives. Under-inflated tires are more prone to tread separation and blowouts, which can cause fatal accidents.
    - Congress should help by authorizing the president to require all service stations to offer free air and to post prominent signs and stickers that say, *"Check your tire pressure every time you fill up – For your safety and America's energy security."*
2. **Obey the speed limit.**

- Slowing down from 75 to 65 miles per hour would reduce highway gasoline consumption by about 10 percent.
- If Americans followed the speed limit on our nation's highways, we would cut total national gasoline use by about 2 percent.
- Slowing down also would save lives.
- Congress should provide extra funding for states that strictly enforce speed limits and post signs that encourage slower driving: *"Drive 65 – for your safety and America's energy security"*

3. Turn off the car engine while waiting in line.

- Americans who run their engines while they are parked or waiting in line waste as much as 4 million gallons of gasoline every day, according to the U.S. Department of Energy.
- Drivers cannot avoid idling in traffic jams, but they should turn off their engines while parked or waiting at drive-in windows. If the wait is longer than 30 seconds, starting up a car again uses less gasoline than leaving it running.
- If drivers turned off their engines while parked or waiting in line, we would cut national gasoline use by about 1 percent.
- Congress should help by authorizing the president to require parking lots, banks, fast-food restaurants, and other drive-through stores to post signs stating: *"Turn off your engine while you wait – for cleaner air and America's energy security"*

4. Use car pools and public transit, and telecommute.

- If each commuter car carried just one more passenger once a week, we would cut gasoline consumption by about 2 percent. That would translate into big savings for the average American worker. Someone with a daily commute of 10 miles each way and a 20- mpg vehicle would save 236 gallons of fuel per year by opting to carpool, telecommute or use transit, according to the American Public Transportation Association.

- A study in Minneapolis-St. Paul found that more than one in 10 employees shifted from driving to some other way of commuting when offered tax-free commuter benefits equal to those provided in the form of free parking.
- Congress should promote commuter choice with a tax-free benefit for employees who car-pool, use transit, bike to work, or telecommute (currently limited to $100) equal to that provided in the form of free parking (currently limited to $175). The federal government also should support and promote Web sites that help commuters find drivers traveling similar routes at similar times. Posters at workplaces could say: *"Car pool or ride the bus – for America's energy security"*

5. Keep cars tuned and use fuel-efficient engine oil.

- A poorly tuned or poorly maintained engine can increase gasoline consumption by as much as 10 to 20 percent.
- Following the recommended maintenance schedule in your owner's manual will save drivers fuel and cars will run better and last longer.
- Motor oils with additives that reduce friction may increase a vehicle's fuel economy by 3 percent or more. Fuel-efficient oils are marked with an "Energy Conserving" label by the American Petroleum Institute (API).
- Congress should authorize the president to require service stations to post prominent signs trumpeting the benefits of keeping cars tuned and using fuel-efficient oil. Signs could say: *"Keep your car tuned to save gas for America's energy security"* and *"Use fuel-efficient motor oil to save gas for America's energy security"*

A National Commitment to Reduce Oil Dependence

To reduce America's vulnerability to future oil supply disruptions, whether from natural disasters, war, or terrorist attacks, we need to make a national commitment to invest in reducing our dependence on oil.

While there are many views of the energy bill enacted last month, everyone agrees that it does not represent such a commitment. In fact, the administration strongly opposed the Senate-passed measure that would have required the president to develop and implement a plan save at least 1 million barrels per day of oil and this critical proposal was not included in the final bill. Yet the conference report retained a provision that effectively lowers fuel economy standards by extending a loophole that allows automakers to claim credit for producing "dual fuel" vehicles, boosting their fuel economy numbers on paper by as much as 1.2 miles per gallon, even though these vehicles use gasoline more than 99% of the time.[8] While biofuels have great potential to reduce our oil dependence, rather than promote use of alternative fuels this provision will increases gasoline consumption by 15 billion gallons over the life of its 10-year extension. Wasting 5 billion gallons of gasoline more than the estimated fuel savings from the administration's proposed light truck fuel economy standards.

The fuel economy standards proposed by the administration on August 23rd miss a critical opportunity to seriously address America's oil dependence. Despite record oil prices and mounting instability in oil producing countries such as Iraq and Iran, the new administration plan actually calls for a slower increase in light truck standards than the modest 1.5 mpg increase adopted by the administration in 2003 when oil was selling for less than $30 a barrel. The proposal also exempts the heaviest SUVs and pickup trucks that weigh over 8500 pounds, such as

[8] Department of Transportation. *Effects of the Alternative Motor Fuels Act CAFE Incentives Policy.* Report to Congress. March 2002.

the Hummer H2 and Ford Excursion, and does not address the car standard, which hasn't been updated in nearly 20 years. As an example of how out of touch this proposal is, its benefits were calculated assuming that the average price of gasoline over the next 25 years would be less than $1.60 per gallon.

Technologies and fuels exist today that can reduce wasteful use of oil in vehicles, industry, aviation, and buildings, delivering savings of at least 3.2 million barrels of oil per day (mbd) by 2015. By 2025 we could save at least 11.2 mbd, cutting our demand in half. We can reach these goals while enhancing the competitiveness of U.S. automakers and farmers by combining efficiency standards with incentives to retool factories, accelerate the production of gasoline-efficient vehicles, and deliver alternative fuels to consumers. Because our economy and national security are tied to America's dependence on oil, smart energy policies that deliver near term results would reduce America's vulnerability, stimulate our domestic economy, and help keep our nation safe

The Set America Free coalition has brought together national security and religious leaders, as well as energy experts, in calling on Congress to take immediate action and establish a national commitment to save 2.5 million barrels per day by 2015—as much as we currently import from the Persian Gulf—and at least 10 million barrels per day by 2025.

Saving oil requires mobilizing American ingenuity, factories, and farms around a clear goal. The first, most critical, step is for Congress to establish a national commitment to cut oil expenses and reinvest the resources—otherwise sent to oil producing countries—in American factories and farms. During World War II, American factories converted in just months from building cars to building tankers and bombers that became the arsenal of democracy. And after the first oil crisis in the early 1970s, America cut its oil demand to keep our economy strong. Although some may doubt the ability to turn this ship around, history shows us that American efficiency and ingenuity

can meet the challenge. Given technologies and fuel available today we know that saving 2.5 mbd by 2015 and at least 10 mbd by 2025 is an achievable, practical goal that would deliver near term benefits in the next 5 to 15 years, while also starting the United States on a new path toward significantly greater energy independence and security thereafter. An analysis of how these savings can be achieved is attached to my testimony.[9]

Failure to take these steps would perpetuate unacceptable risks for our economic and national security, American jobs, and consumers. Rising oil prices have placed a devastating and disproportionate burden on U.S. automakers, according to a report released last month by NRDC and the University of Michigan. Without serious action to improve fuel economy performance, Detroit automakers will continue to lose thousands of jobs and millions in earnings, leaving them at a sharp disadvantage to their Japanese competitors. This report is also attached to my testimony.[10] Rather than exporting billions of dollars more to oil regimes with every rise in the prices of oil, the United Sates should be investing those dollars at home to support domestic industries and jobs, and leading the world in reducing global demand for oil.

Conclusion

Katrina has highlighted the vulnerability of our energy system due to our dangerous dependence on petroleum to fuel our transportation system. The best way to reduce our vulnerability—both immediately and in the longer term—is to reduce demand by becoming more efficient with every barrel of oil we use and to diversify our supply by relying more on homegrown biofuels. A national commitment to saving oil is long overdue. If we make the commitment now America's oil dependence could be reduced by 2.5 million barrels per day by

[9] Bordetsky, A. et al., *Securing America: Solving Our Oil Dependence Through Innovation.* NRDC and IAGS, 2005. http://www.nrdc.org/air/transportation/oilsecurity/plan.pdf

[10] McManus, W. et al., *In the Tank: How Oil Prices Threaten Automakers' Profits and Job.* NRDC and OSAT, July 2005. http://www.nrdc.org/air/transportation/inthetank/contents.asp

2015 and by at least 10 million barrels per day by 2025. Meeting such a commitment will reduce our vulnerability to catastrophes like Katrina, protect the environment, and make us more secure.